Fig. 1

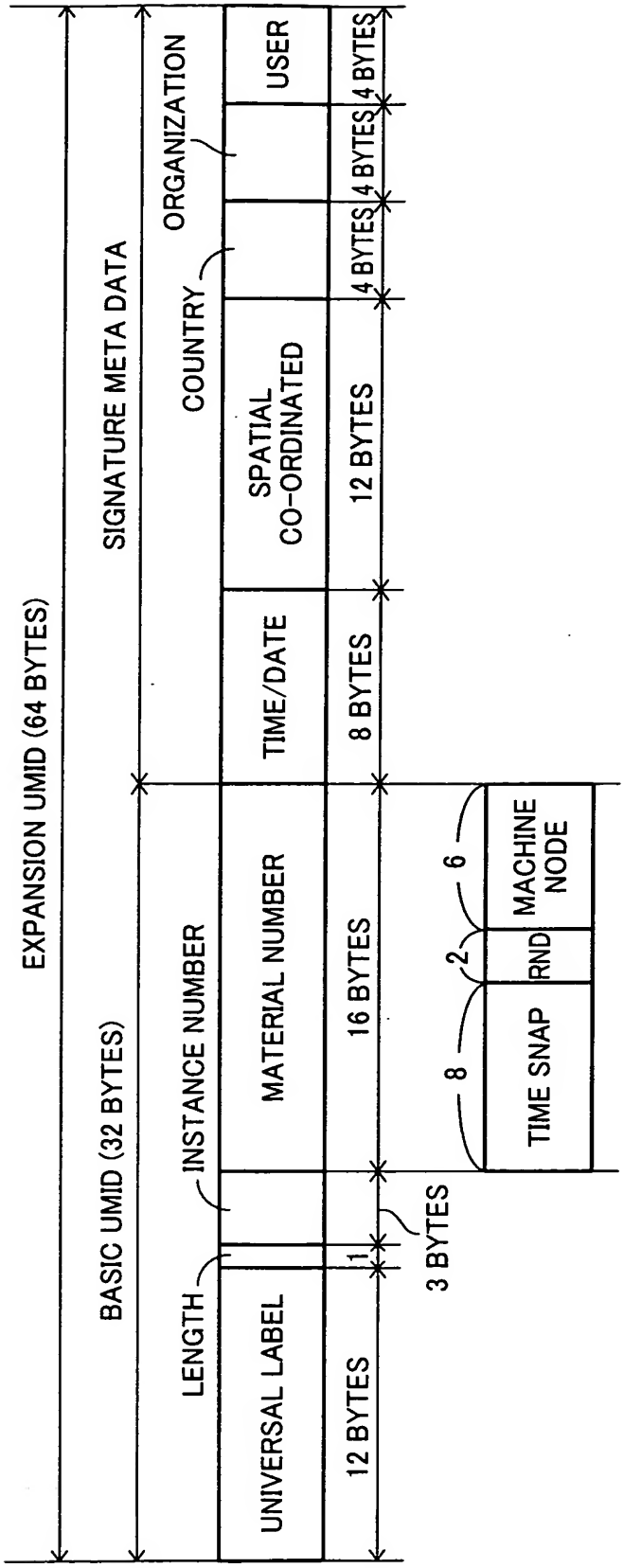

EXPANSION UMID (64 BYTES)
SIGNATURE META DATA
BASIC UMID (32 BYTES)
UNIVERSAL LABEL
12 BYTES
LENGTH
1
INSTANCE NUMBER
3 BYTES
MATERIAL NUMBER
16 BYTES
TIME SNAP
8
RND
2
MACHINE NODE
6
TIME/DATE
8 BYTES
SPATIAL CO-ORDINATED
12 BYTES
COUNTRY
4 BYTES
ORGANIZATION
4 BYTES
USER
4 BYTES

Fig. 2

_RecStart	START POSITION OF RECORDING
_RecEnd	END POSITION OF RECORDING
_ShotMark1	ARBITRARY POSITION 1
_ShotMark2	ARBITRARY POSITION 2
_Cut	CUTTING POSITION
_Flash	FLASH DETECTING POSITION
_FilterChange	POSITION WHERE LENS FILTER IS CHANGED
_ShutterSpeedChange	POSITION WHERE SHUTTER SPEED IS CHANGED
_GainChange	POSITION WHERE GAIN IS CHANGED
_WhiteBalanceChange	POSITION WHERE WHITE BALANCE IS CHANGED
_OverBrightness	POSITION WHERE VIDEO OUTPUT LEVEL EXCEEDS 100%
_OverAudioLimiter	POSITION WHERE AUDIO OUTPUT LEVEL EXCEEDS LIMIT VALUE
_In-XXX	CUTTING START POSITION OF MATERIAL
_Out-XXX	CUTTING END POSITION OF MATERIAL

Fig. 3

Fig. 4

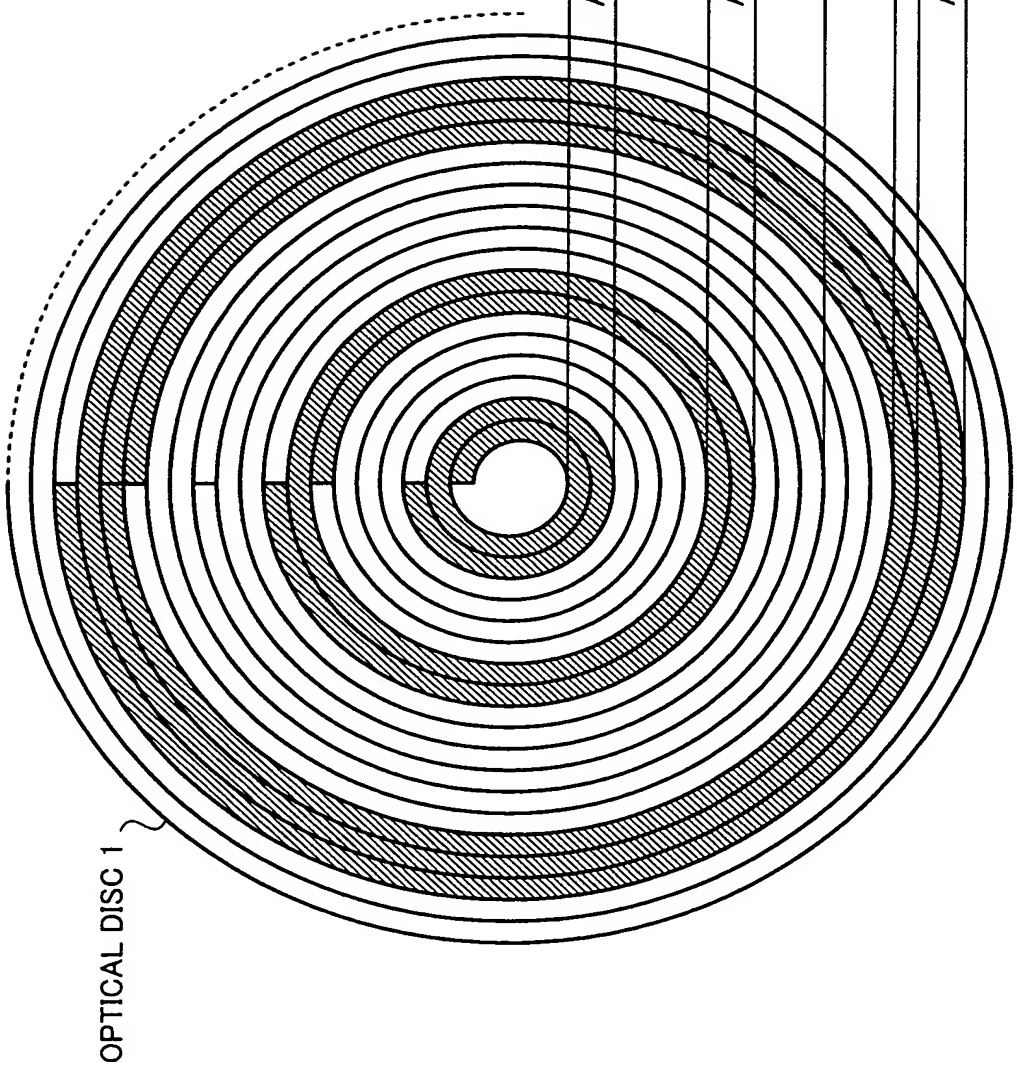

OPTICAL DISC 1
AUDIO ANNUAL RING DATA #1
VIDEO ANNUAL RING DATA #1
AUDIO ANNUAL RING DATA #2
VIDEO ANNUAL RING DATA #2
AUXILIARY AV ANNUAL RING DATA #2
META ANNUAL RING DATA #1
AUDIO ANNUAL RING DATA #3
VIDEO ANNUAL RING DATA #3

Fig. 5A

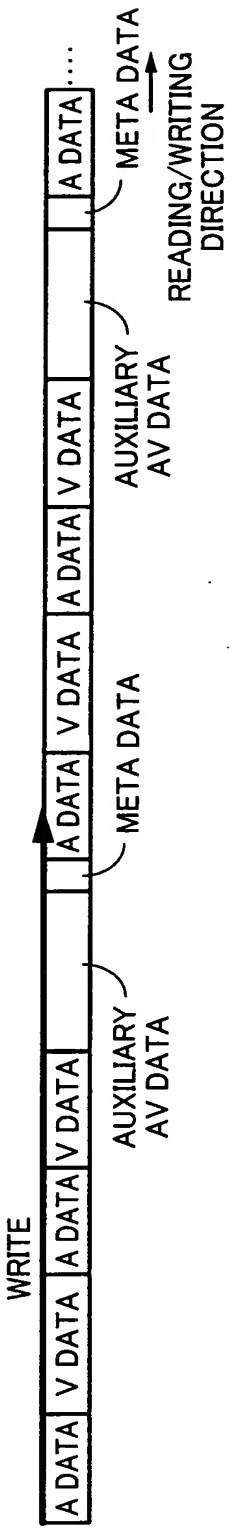
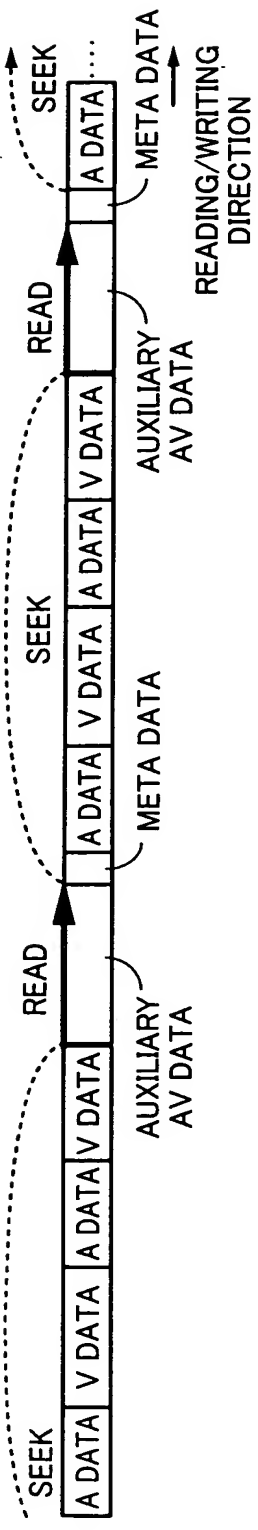

WRITE
A DATA
V DATA
A DATA
V DATA
AUXILIARY AV DATA
META DATA
A DATA
V DATA
A DATA
V DATA
AUXILIARY AV DATA
META DATA
A DATA
READING/WRITING DIRECTION

Fig. 5B


SEEK
A DATA
V DATA
A DATA
V DATA
AUXILIARY AV DATA
READ
META DATA
A DATA
V DATA
A DATA
V DATA
AUXILIARY AV DATA
SEEK
META DATA
A DATA
READING/WRITING DIRECTION

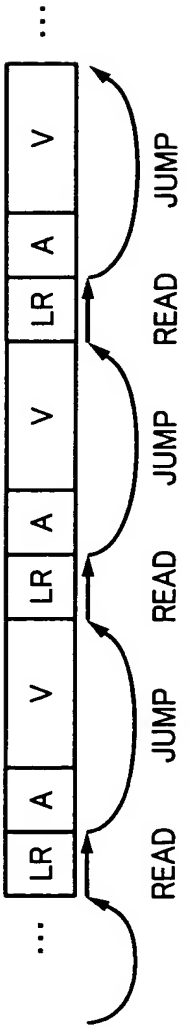


Fig. 6A

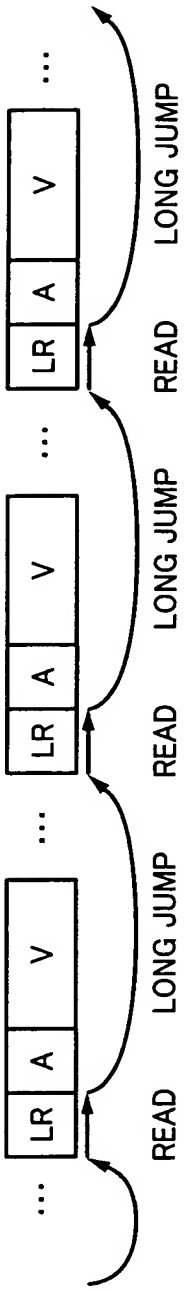


Fig. 6B

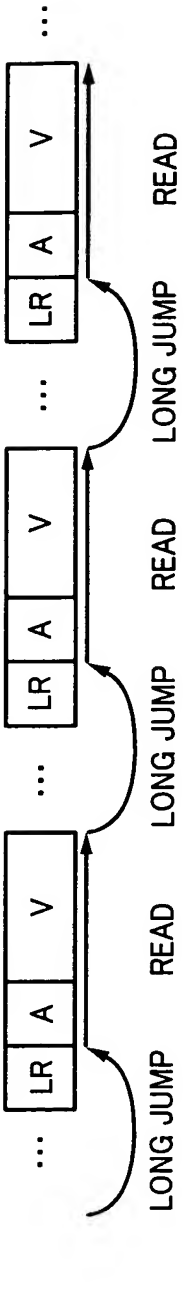


Fig. 6C

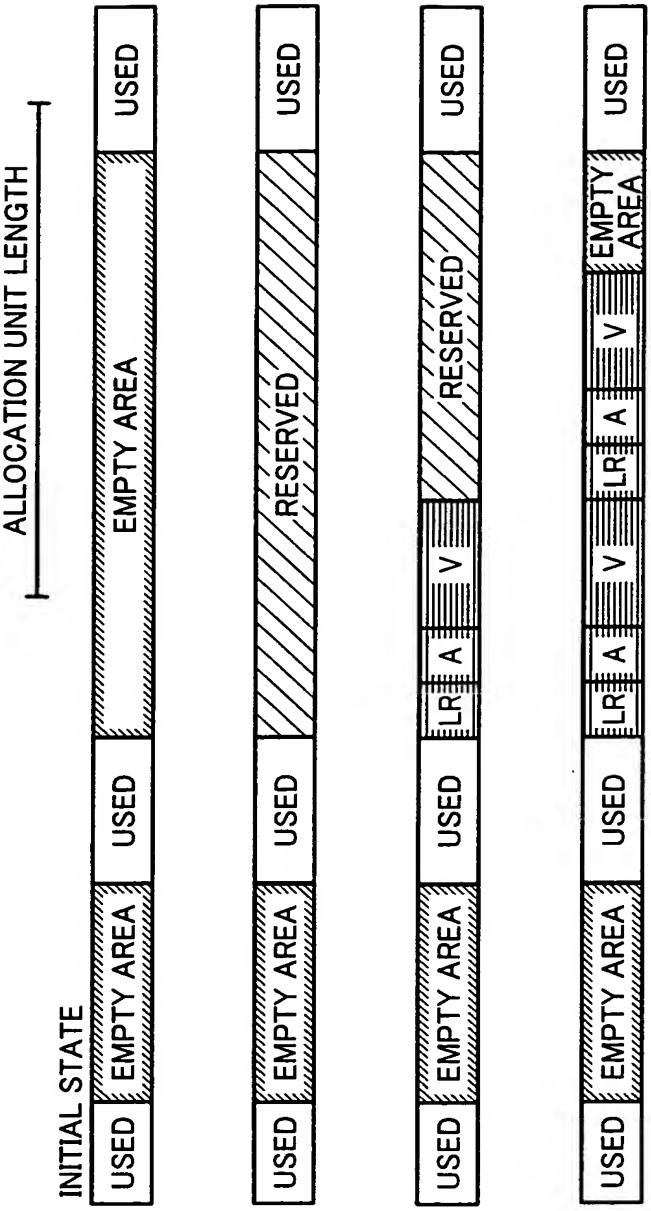


Fig. 7A

Fig. 7B

Fig. 7C

Fig. 7D

Fig. 8

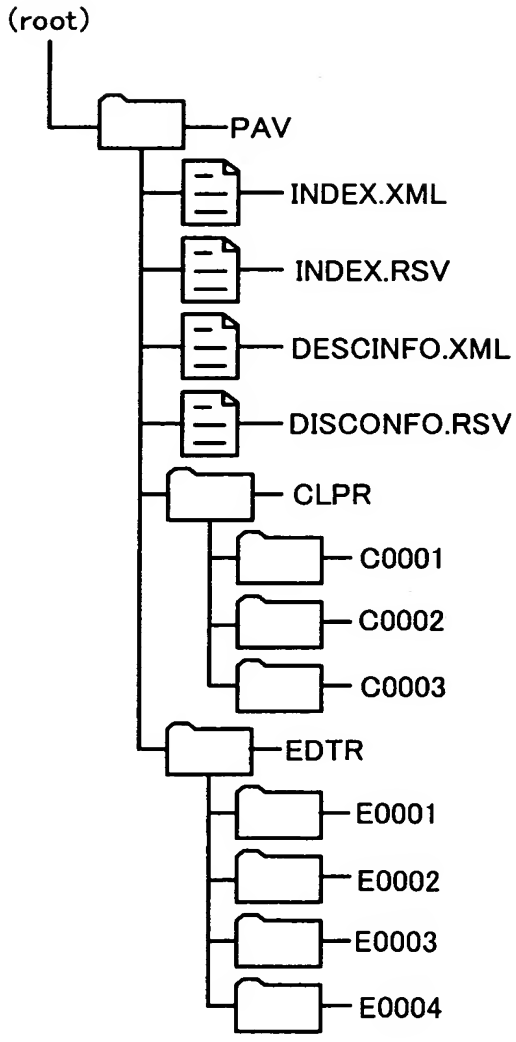

(root)
PAV
INDEX.XML
INDEX.RSV
DESCINFO.XML
DISCONFO.RSV
CLPR
C0001
C0002
C0003
EDTR
E0001
E0002
E0003
E0004

Fig. 9

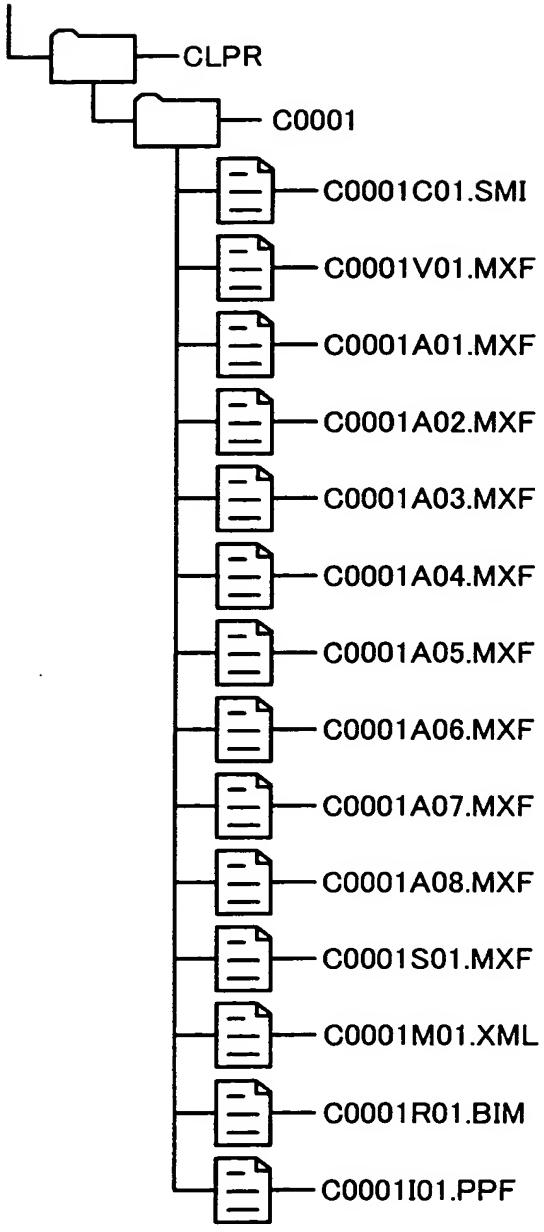

CLPR
C0001
C0001C01.SMI
C0001V01.MXF
C0001A01.MXF
C0001A02.MXF
C0001A03.MXF
C0001A04.MXF
C0001A05.MXF
C0001A06.MXF
C0001A07.MXF
C0001A08.MXF
C0001S01.MXF
C0001M01.XML
C0001R01.BIM
C0001I01.PPF

Fig. 10

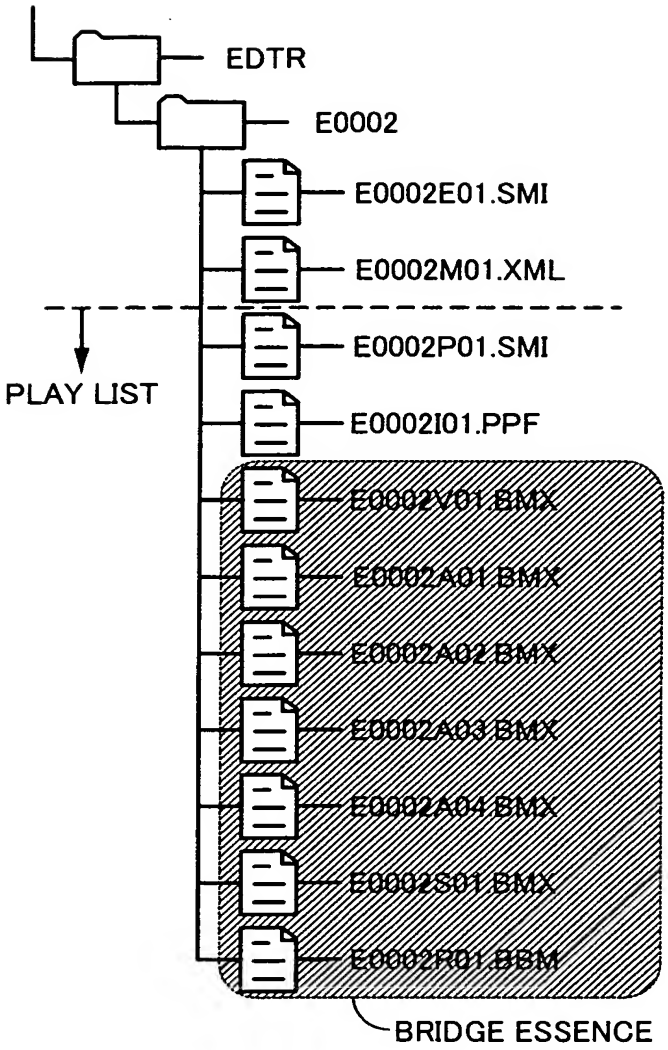
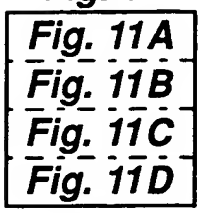

EDTR
E0002
E0002E01.SMI
E0002M01.XML
PLAY LIST
E0002P01.SMI
E0002I01.PPF
E0002V01.BMX
E0002A01.BMX
E0002A02.BMX
E0002A03.BMX
E0002A04.BMX
E0002S01.BMX
E0002R01.BBM
BRIDGE ESSENCE

Fig. 11A

Fig. 11




```
<!-- Definiton of VideoFormatType -->
<complexType name="VideoFormatType">
    <sequence>
        <element name="VideoRecPort" minOccurs="0">
            <complexType>
                <attribute name="port" type="lib:videoPortType" use="required"/>
            </complexType>
        </element>
        <element name="VideoFrame">
            <complexType>
                <attribute name="videoCodec" type="lib:videoCodecType"
                 use="required"/>
                <attribute name="captureFps" use="optional">
                    <simpleType>
                        <restriction base="string">
                            <pattern value="((¥d{3}|¥d{2}|¥d{1})(¥.¥d{2})?)?(p|i)"/>
                        </restriction>
                    </simpleType>
                </attribute>
                <attribute name="recFps" use="optional">
                    <simpleType>
                        <restriction base="string">
                            <pattern value="(¥d{3}|¥d{2}|¥d{1})(¥.¥d{2})?"/>
                        </restriction>
                    </simpleType>
                </attribute>
                <attribute name="formatFps" use="required" type="lib:fpsType"/>
                <attribute name="clipBegin" use="optional" default="0"
                 type="lib:frameCountType"/>
            </complexType>
        </element>
```

Fig. 11B

```
<element name="VideoLayout" minOccurs="0">
        <complexType>
            <sequence>
                <element name="PullDownSetting" minOccurs="0">
                    <complexType>
                        <attribute name="pullDownKind" use="required">
                            <simpleType>
                                <restriction base="string">
                                    <enumeration value="1-1"/>
                                    <enumeration value="2-2"/>
                                    <enumeration value="2-3"/>
                                    <enumeration value="2-3-3-2"/>
                                    <enumeration value="24-25"/>
                                    <enumeration value="other"/>
                                </restriction>
                            </simpleType>
                        </attribute>
                        <attribute name="aFramePhase" use="required">
                            <simpleType>
                                <restriction base="string">
                                    <pattern value="¥d{2}(¥-(0|1))?"/>
                                </restriction>
                            </simpleType>
                        </attribute>
                    </complexType>
                </element>
            </sequence>
            <attribute name="pixel" type="unsignedShort" use="required"/>
            <attribute name="numOfVerticalLine" type="unsignedShort"
             use="required"/>
            <attribute name="aspectRatio" type="lib:aspectRatioType"
             use="optional"/>
        </complexType>
    </element>
</sequence>
</complexType>
```

Fig. 11C

```
<!-- Definiton of AudioFormatType -->
<complexType name="AudioFormatType">
    <sequence>
        <element name="AudioRecPort" minOccurs="1" maxOccurs="8">
            <complexType>
                <attribute name="port" type="lib:audioPortType"
                 use="required"/>
                <attribute name="audioCodec" type="lib:audioCodecType"
                 use="required"/>
                <attribute name="trackDst" type="lib:trackType"
                 use="required"/>
            </complexType>
        </element>
    </sequence>
    <attribute name="numOfChannel" type="lib:numOfChannelType" use="required"/>
     use="required"/>
</complexType>
```

Fig. 11D

```
<!-- Definiton of SubStreamType -->
<complexType name="SubStreamType">
      <attribute name="codec" type="lib:subStreamCodecType" use="required"/>
      <attribute name="clipBegin" use="optional" default="0"
       type="lib:frameCountType"/>
</complexType>
```

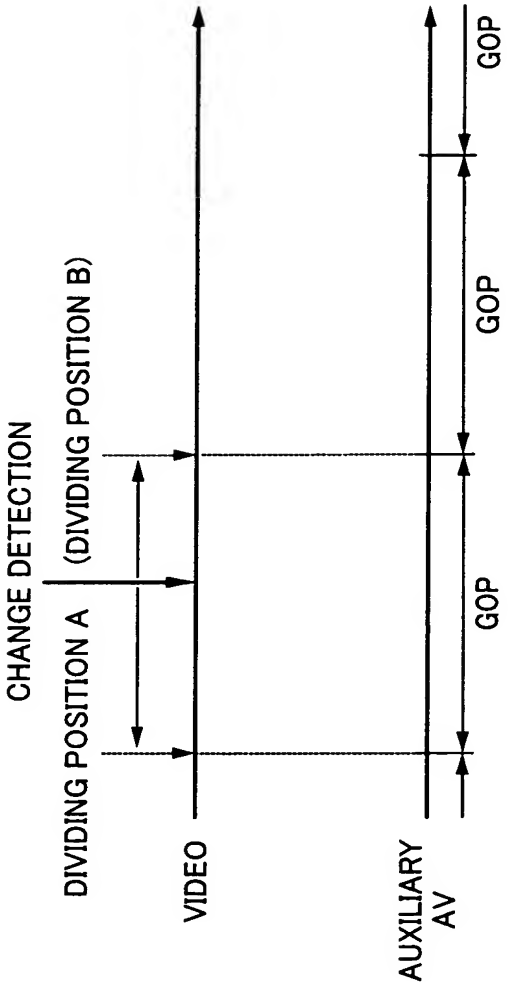


Fig. 12A

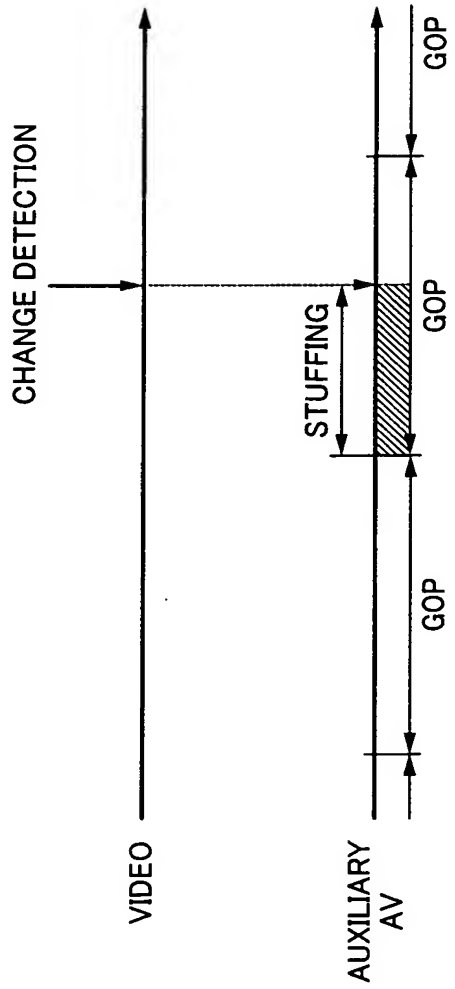


Fig. 12B

Fig. 13

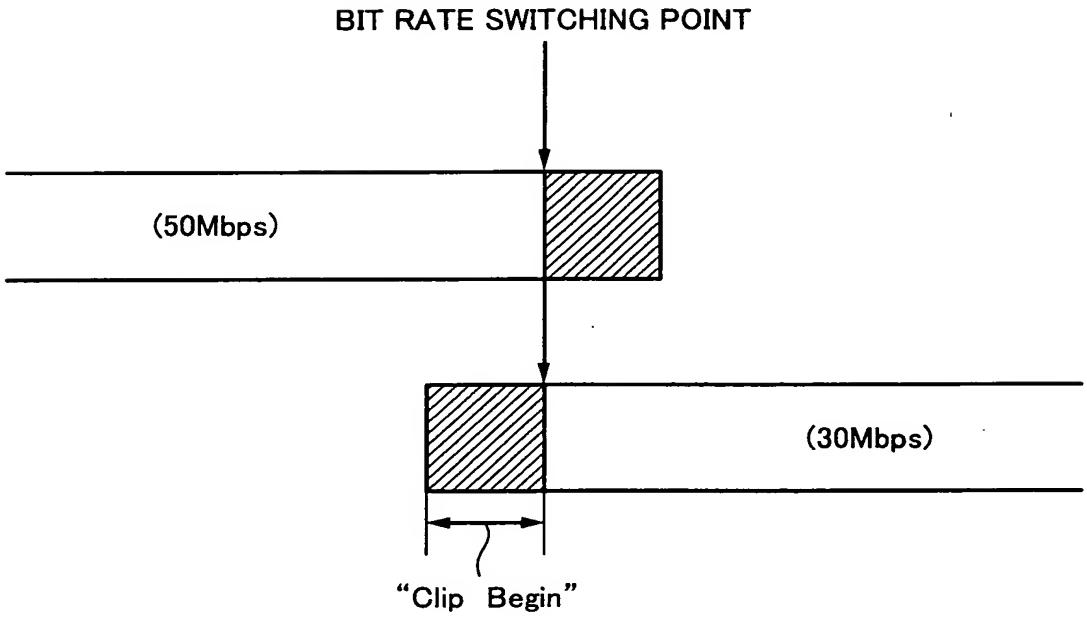


Fig. 14

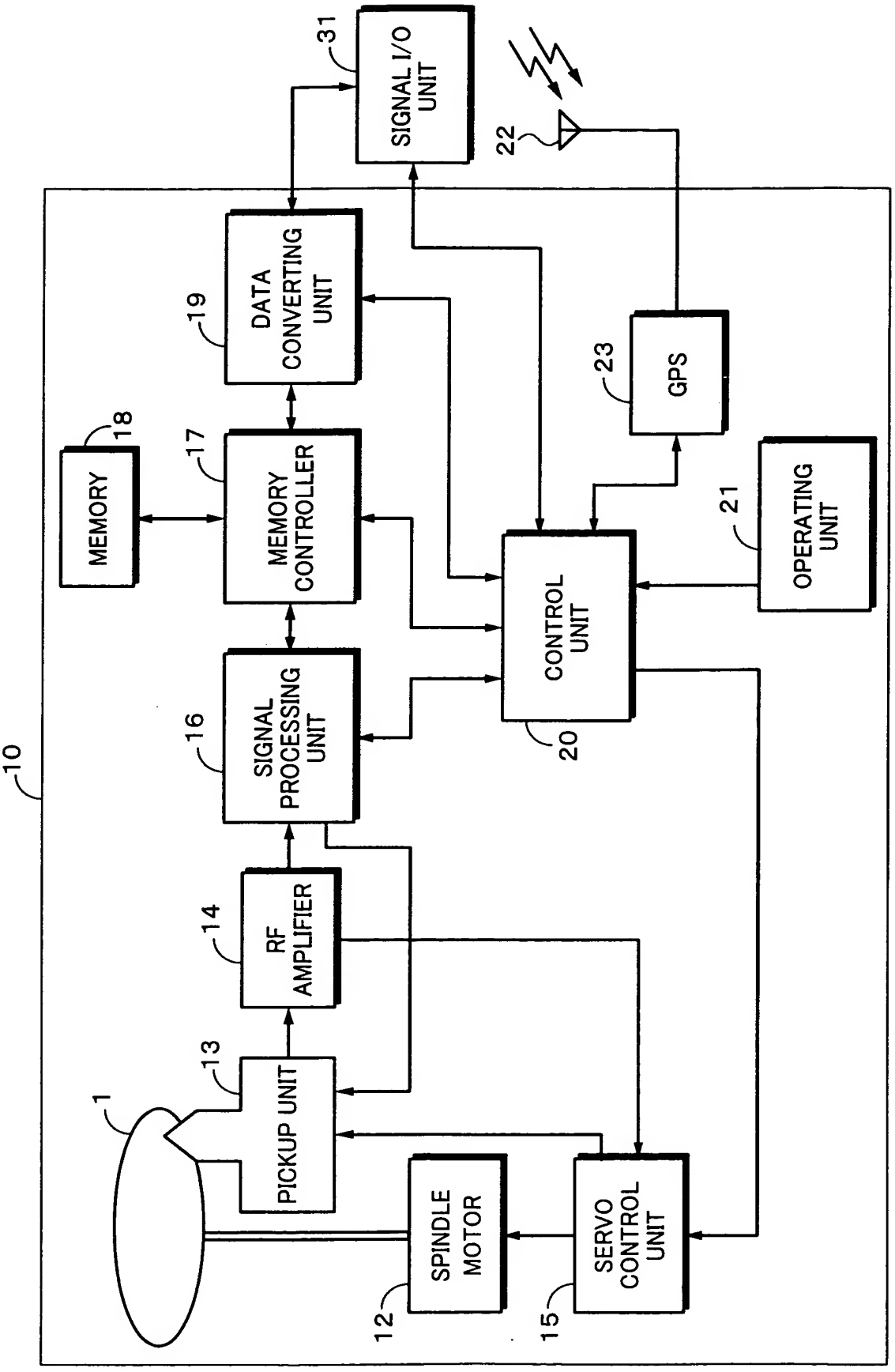

10
1
PICKUP UNIT
13
RF AMPLIFIER
14
SIGNAL PROCESSING UNIT
16
MEMORY CONTROLLER
17
MEMORY
18
DATA CONVERTING UNIT
19
CONTROL UNIT
20
OPERATING UNIT
21
GPS
23
SIGNAL I/O UNIT
31
22
SPINDLE MOTOR
12
SERVO CONTROL UNIT
15

Fig. 15

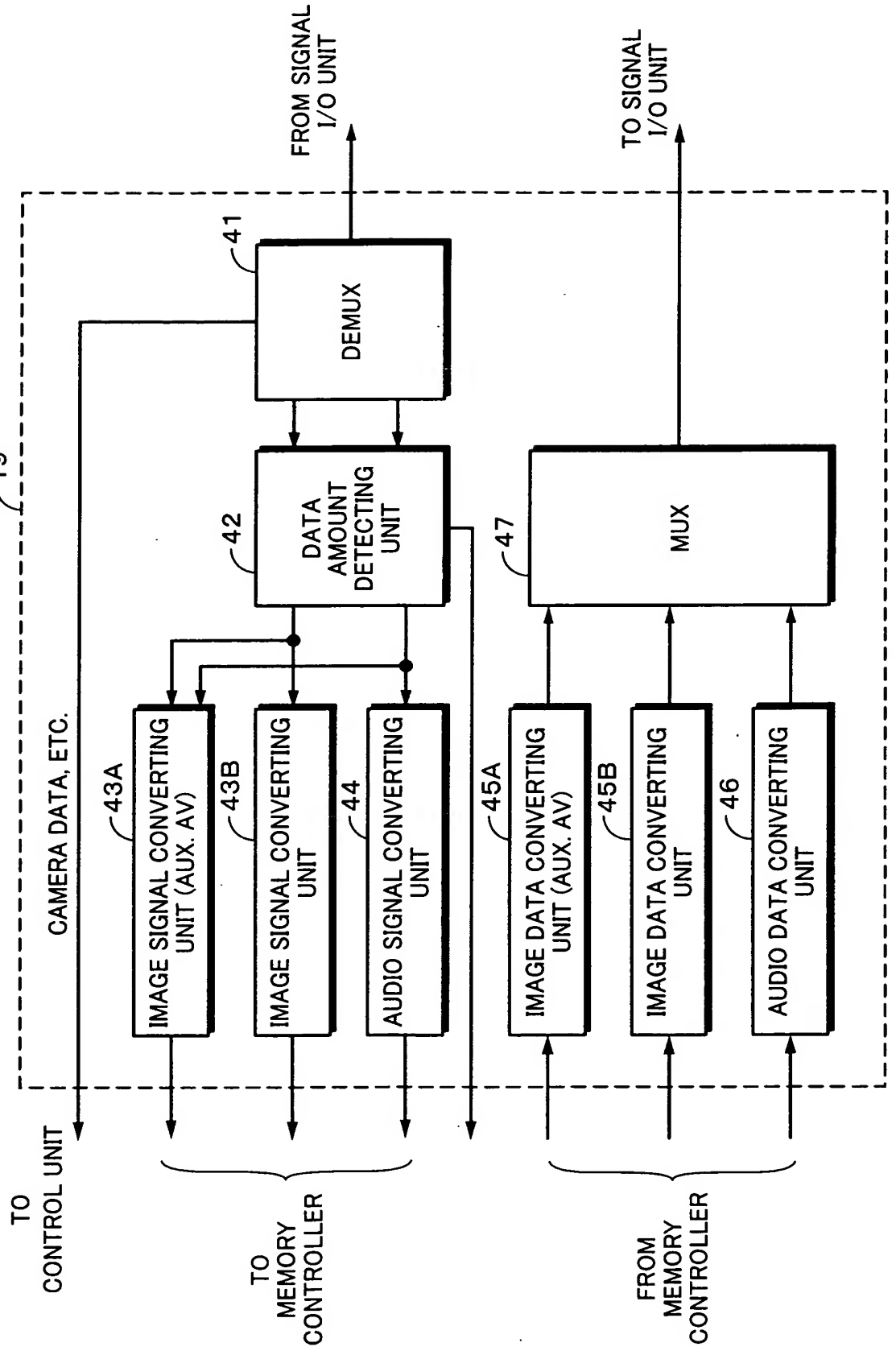
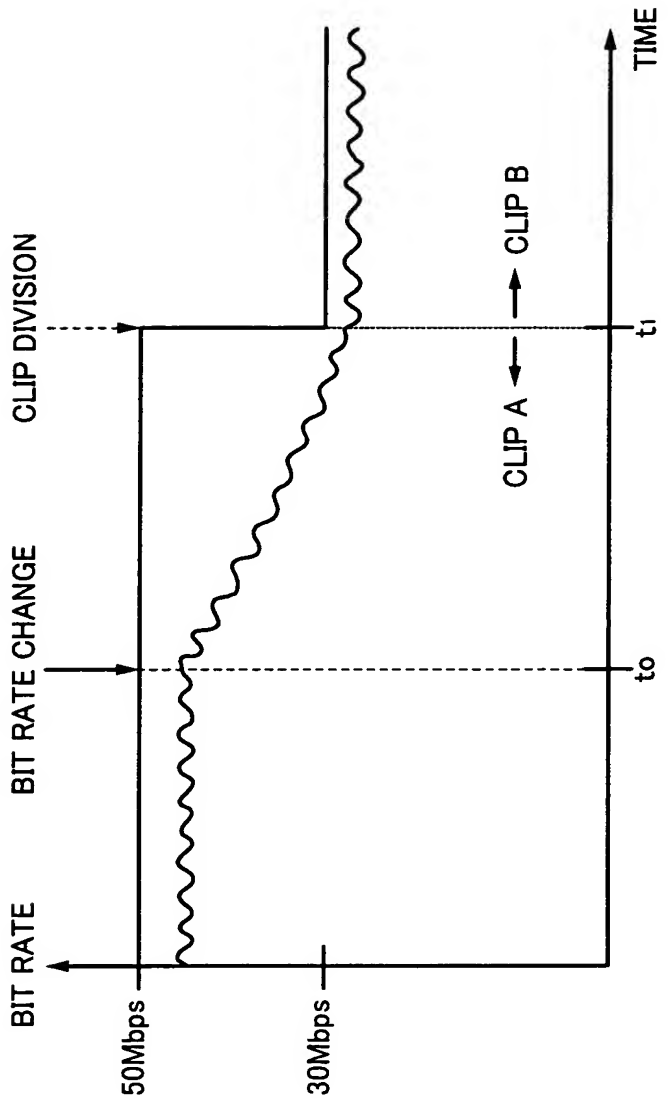

19
CAMERA DATA, ETC.
FROM SIGNAL I/O UNIT
TO SIGNAL I/O UNIT
41
DEMUX
42
DATA AMOUNT DETECTING UNIT
47
MUX
43A
IMAGE SIGNAL CONVERTING UNIT (AUX. AV)
43B
IMAGE SIGNAL CONVERTING UNIT
44
AUDIO SIGNAL CONVERTING UNIT
45A
IMAGE DATA CONVERTING UNIT (AUX. AV)
45B
IMAGE DATA CONVERTING UNIT
46
AUDIO DATA CONVERTING UNIT
TO CONTROL UNIT
TO MEMORY CONTROLLER
FROM MEMORY CONTROLLER

Fig. 16


TIME
CLIP DIVISION
CLIP B
CLIP A
t1
BIT RATE CHANGE
t0
BIT RATE
50Mbps
30Mbps

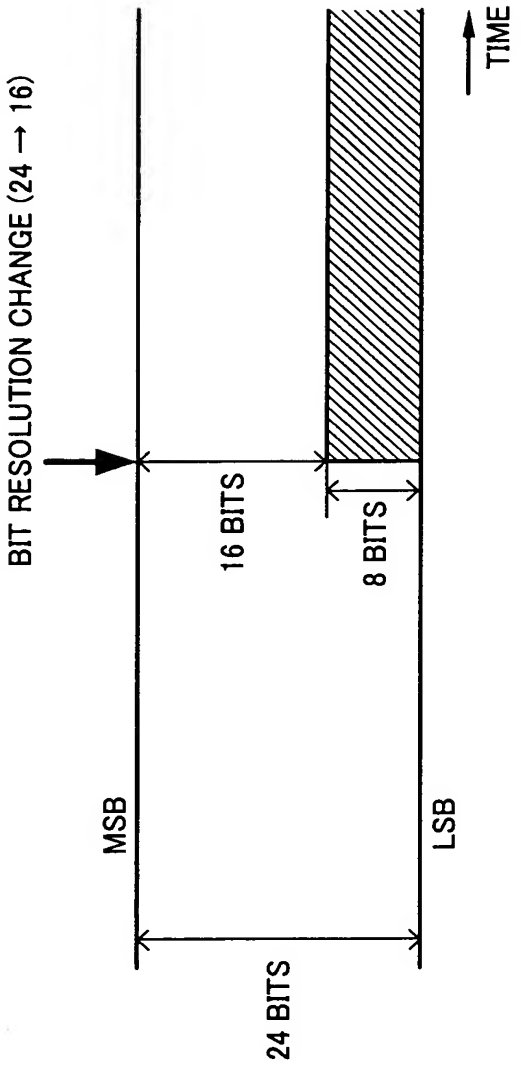


Fig. 17A

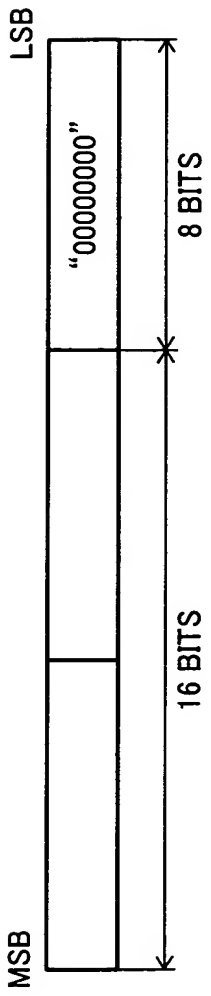


Fig. 17B

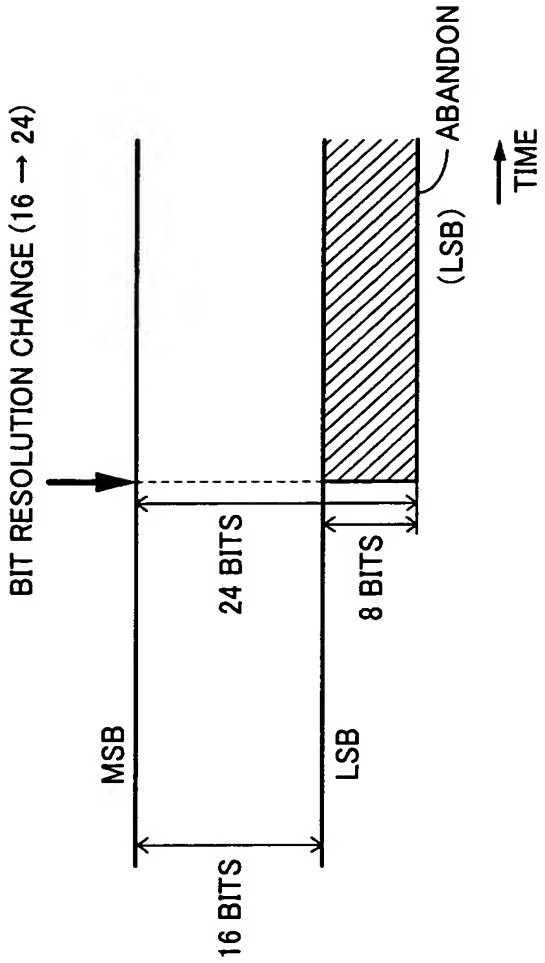


Fig. 18A

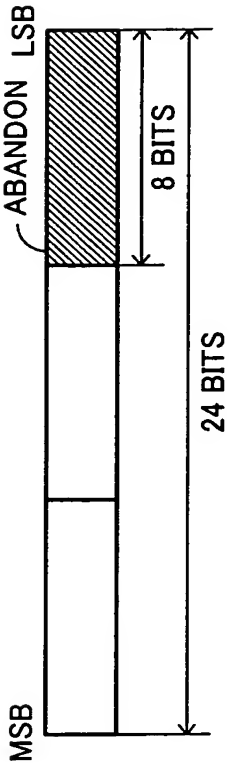


Fig. 18B

DESCRIPTION OF REFERENCE NUMERALS

1	OPTICAL DISC
10	DISC RECORDING/REPRODUCING APPARATUS
16	SIGNAL PROCESSING UNIT
17	MEMORY CONTROLLER
18	MEMORY
19	DATA CONVERTING UNIT
20	CONTROL UNIT
21	OPERATING UNIT
31	SIGNAL I/O UNIT
42	DATA AMOUNT DETECTING UNIT
43A, 43B	IMAGE SIGNAL CONVERTING UNIT
44	AUDIO SIGNAL CONVERTING UNIT
45A, 45B	IMAGE DATA CONVERTING UNIT
46	AUDIO DATA CONVERTING UNIT